

AMENDMENTS TO THE CLAIMS

Please cancel claims 1 and 3-6 without prejudice.

Please amend claims 2, 7-8, 10-11, and 14, and please add new claims 51-59 as follows.

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Cancelled)

2. (Currently Amended): An isolated polynucleotide that encodes ~~at least ten consecutive amino acids of a polypeptide having comprising a~~ ~~an~~ amino acid sequence corresponding to ~~set forth in~~ SEQ ID NO:2.

3. – 6. (Cancelled)

7. (Currently Amended): ~~A~~ An isolated polynucleotide according to claim 6, comprising the sequence ~~recited~~ ~~set forth~~ in SEQ ID NO:1.

8. (Currently Amended): An expression vector comprising a polynucleotide according to ~~any one of claim~~ ~~claims 62, 7, 51-56.~~

9. (Original): A host cell transformed or transfected with an expression vector according to claim 8.

10. (Currently Amended): An antisense polynucleotide comprising at least 15 consecutive nucleotides ~~a polynucleotide that is~~ complementary to a polynucleotide according to any one of ~~claim~~ claims 62, 7, 51-56.

11. (Currently Amended): An isolated polynucleotide that detectably hybridizes to the complement of the sequence ~~recited~~ set forth in SEQ ID NO:1 under conditions that include a wash in 0.1X SSC and 0.1% SDS at 60 °C for 15 minutes, wherein said isolated polynucleotide exhibits at least 70% nucleotide identity to a polynucleotide comprising the sequence set forth in SEQ ID NO:1, and wherein the isolated polynucleotide encodes a polypeptide capable of dephosphorylating an activated mitogen-activated protein kinase (MAP-kinase).

12. (Original): An expression vector comprising a polynucleotide according to claim 10 or claim 11.

13. (Original): A host cell transformed or transfected with an expression vector according to claim 12.

14. (Currently Amended): A method of producing a dual specificity phosphatase 2 (DSP-2) polypeptide, comprising the steps of:

- (a) culturing a host cell according to claim 9 under conditions that permit expression of the DSP-2 polypeptide; and
- (b) isolating DSP-2 polypeptide from the host cell culture.

15. – 50. (Cancelled)

51. (New) An isolated polynucleotide that encodes a polypeptide capable of dephosphorylating an activated mitogen-activated protein kinase (MAP-kinase), said isolated polynucleotide comprising a sequence at least 70% identical to a polynucleotide that encodes a polypeptide comprising an amino acid sequence set forth in SEQ ID NO:2.

52. (New) An isolated polynucleotide that encodes a polypeptide capable of dephosphorylating an activated mitogen-activated protein kinase (MAP-kinase), said isolated polynucleotide comprising a sequence at least 80% identical to a polynucleotide that encodes a polypeptide comprising an amino acid sequence set forth in SEQ ID NO:2.

53. (New) An isolated polynucleotide that encodes a polypeptide capable of dephosphorylating an activated mitogen-activated protein kinase (MAP-kinase), said isolated polynucleotide comprising a sequence at least 90% identical to a polynucleotide that encodes a polypeptide comprising an amino acid sequence set forth in SEQ ID NO:2.

54. (New) An isolated polynucleotide that encodes a polypeptide capable of dephosphorylating an activated mitogen-activated protein kinase (MAP-kinase), said polypeptide comprising an amino acid sequence of SEQ ID NO:2, wherein aspartic acid is located at position 73 and the peptide sequence LHCAAGVSR (SEQ ID NO:3) is located at positions 102 through 111 of SEQ ID NO:2, wherein said polynucleotide comprises a sequence at least 70% identical to a polynucleotide that encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2.

55. (New) An isolated polynucleotide that encodes a polypeptide capable of dephosphorylating an activated mitogen-activated protein kinase (MAP-kinase), said polypeptide comprising an amino acid sequence of SEQ ID NO:2, wherein aspartic acid is located at position 73 and the peptide sequence LHCAAGVSR (SEQ ID NO:3) is located at positions 102 through 111 of SEQ ID NO:2, wherein said polynucleotide comprises a sequence at least 80% identical to a polynucleotide that encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2.

56. (New) An isolated polynucleotide that encodes a polypeptide capable of dephosphorylating an activated mitogen-activated protein kinase (MAP-kinase), said polypeptide comprising an amino acid sequence of SEQ ID NO:2, wherein aspartic acid is located at position 73 and the peptide sequence LHCAAGVSR (SEQ ID NO:3) is located at positions 102 through 111 of SEQ ID NO:2, wherein said polynucleotide comprises a sequence at least 90% identical

to a polynucleotide that encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2.

57. (New) The isolated polynucleotide according to any one of claims 51-53, wherein the polypeptide comprises the amino acid sequence LHCAAGVSR (SEQ ID NO:3).

58. (New) An expression vector comprising a polynucleotide according to claim 57.

59. (New) A host cell transformed or transfected with an expression vector according to claim 58.